

CLAIM AMENDMENTS

Claim 1 (withdrawn): An organic light-emitting device, comprising:

an anode glass base;

a hole transporting layer overlapped on said anode glass base;

an organic light-emitting layer overlapped on said hole transporting layer such that said hole transporting layer is sandwiched between said anode glass base and said organic light-emitting layer;

an electron transporting layer overlapped on said organic light-emitting layer;

a metallic cathode layer overlapped on said electron transporting layer; and an organic buffer layer, which is overlappedly disposed between said electron transporting layer and said metallic cathode layer, having a hydrophilic head group firmly bonding with said metallic cathode layer and a lipophilic tail group firmly bonding with said electron transporting layer such that said organic buffer layer forms as a heat insulating media between said organic light-emitting layer and said metallic cathode layer for preventing an uneven thermal expansion difference therebetween during operating said organic light-emitting device.

Claim 2 (withdrawn): An organic light-emitting device, as recited in claim 1, wherein said organic buffer layer is made of fatty acid salt having a chemical structure containing five to twenty carbon atoms (C.sub.5 to C.sub.20), wherein said head group of said fatty acid salt is formed as hydrophilic and said tail group of said fatty acid salt is formed as lipophilic.

Claim 3 (withdrawn): An organic light-emitting device, as recited in claim 1, wherein said organic buffer layer has a thickness from 2 to 4 nanometers.

Claim 4 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said organic buffer layer has a thickness from 2 to 4 nanometers.

Claim 5 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium stearate (NaSt).

Claim 6 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium stearate (NaSt).

Claim 7 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of zinc stearate (ZnSt).

Claim 8 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of zinc stearate (ZnSt).

Claim 9 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of aluminum stearate (AlSt).

Claim 10 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of aluminum stearate (AlSt).

Claim 11 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium oleate (NaOl).

Claim 12 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium oleate (NaOl).

Claim 13 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium zincate (NaZt).

Claim 14 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium zincate (NaZt).

Claims 15-20 (cancelled).

Claim 21 (new): A method of producing an organic light-emitting device, comprising the steps of:

- (a) forming a hole transporting layer overlapping on an anode glass base;
- (b) forming an organic transporting layer overlapping on said hole transporting layer;
- (c) forming an electron transporting layer overlapping on said organic transporting layer;

(d) forming a metallic cathode layer; and

(e) producing an insulating organic buffer layer and bonding said insulating organic buffer layer to said electron transporting layer with a lipophilic tail group thereof and bonding to said metallic cathode layer with a hydrophilic head group thereof in such a manner that said insulating organic buffer layer is sandwiched and forms a heat insulating media between said electron transporting layer and said metallic cathode layer for preventing an uneven thermal expansion difference therebetween during operating said organic light-emitting device, wherein said insulating organic buffer layer is produced by the following steps:

(e1) providing a fatty acid salt having a chemical structure containing five to twenty carbon atoms (C.sub.5 to C.sub.20), wherein a head group of said fatty acid salt is formed as said hydrophilic head group and said tail group of said fatty acid salt is formed as said lipophilic tail group; and

(e2) growing said fatty acid salt through a thermal deposition system having a vacuum degree above 1.0×10^{-3} Pascal, and a temperature between 300°C to 400°C, to control a growing speed of said fatty acid from 0.1 to 0.9 nanometer per minute so as to produce said insulating organic buffer layer.

Claim 22 (new): The method, as recited in claim 21, wherein, in the step (e2), said thermal deposition system is operated under a vacuum pressure of 1×10^{-6} Pascal.

Claim 23 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of sodium stearate (NaSt) to form said organic buffer layer has a thickness from 2 to 4 nanometers, wherein said temperature is controlled at $340^{\circ}\text{C} \pm 1^{\circ}\text{C}$ to ensure a growth rate of said organic buffer layer from 0.3 to 0.5 nanometer per minute.

Claim 24 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of zinc stearate (ZnSt) to form said organic buffer layer has a thickness of about 2 nanometers and said temperature is controlled at about 300°C.

Claim 25 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of aluminum stearate (AlSt) to form said organic buffer layer has a thickness about 3 nanometers and said temperature is controlled at about 350°C.

Claim 26 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of sodium oleate (NaOl) to form said organic buffer layer has a thickness about 4 nanometers and said temperature is controlled at about 400°C.